

# EARTH LEAKAGE PROTECTIVE ARRANGEMENT

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**Inventor:**

**Applicant:** SIEMENS AG

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## Abstract of GB1369817

1369817 Protective arrangements SIEMENS AG  
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41984/71 Heading H2K An earth leakage protective arrangement comprises a circuit-breaker with a latch 10 releasable by a tripping device 8 having a coil 9 which is energized to operate the device, and a differential transformer 4 with a secondary winding 7 connected to the coil 9; the "induction swing" and the "relative pulse permeability" of the transformer core 5 being respectively at least 3000 gauss and at least 1000. This enables satisfactory tripping to be obtained when the earth leakage current is either an alternating current or a chopped direct current as might occur from a thyristor controlled motor. The required magnetic characteristics of the core may be obtained by specified heat treatment of known specified alloys. Alternatively, a tape wound core is provided with air gaps.

